TABLE 84

Federal obligations for research and development, by performer: FYs 1967–2022
(Dollars in millions)

Fiscal year	Total	Intramural						
		Federal agencies <sup>a</sup>		Businesses	Higher education <sup>b</sup>	Nonprofit organizations	State and local governments	Non-U.S. performers
1967	16,529	3,396	1,275	9,878	1,454	400	63	63
1968	15,921	3,493	1,362	9,047	1,487	377	100	54
1969	15,641	3,501	1,390	8,703	1,529	364	102	51
1970	15,339	4,079	1,429	7,770	1,476	445	100	40
1971	15,543	4,228	1,419	7,588	1,645	459	141	63
1972	16,496	4,589	1,506	7,716	1,904	515	207	60
1973	16,800	4,762	1,491	7,731	1,917	578	257	64
1974	17,410	4,911	1,581	7,752	2,214	672	214	65
1975	19,039	5,354	1,859	8,423	2,411	702	228	62
1976	20,780	5,769	2,106	9,340	2,552	709	231	73
1977	23,450	6,012	2,690	10,717	2,905	800	238	88
1978	25,845	6,810	2,870	11,400	3,375	998	268	123
1979	28,145	7,418	3,175	12,172	3,889	1,026	310	155
1980	29,830	7,632	3,383	12,969	4,263	1,106	266	211
1981	33,104	8,426	3,730	14,868	4,466	1,069	222	323
1982	36,433	9,141	4,004	17,192	4,605	1,092	184	214
1983	38,712	10,582	4,476	17,020	4,966	1,242	186	240
1984	42,225	11,572	4,691	18,610	5,547	1,497	131	176
1985	48,360	12,945	5,296	21,705	6,340	1,699	129	245
1986	51,412	13,535	5,016	24,201	6,559	1,677	128	296
1987	55,254	13,413	5,580	26,768	7,337	1,711	148	295
1988	56,769	14,115	5,891	26,719	7,828	1,683	142	392
1989	61,406	15,025	6,075	28,548	8,672	2,000	167	919
1990	63,559	15,849	6,398	29,370	9,138	2,248	214	343
1991	61,295	15,138	6,451	26,421	10,169	2,637	215	264
1992	65,593	15,583	6,718	29,745	10,271	2,804	184	288
1993	67,314	16,663	5,819	30,219	11,208	2,812	320	272
1994	67,235	16,132	5,322	30,455	11,797	2,937	325	267
1995	68,187	17,025	5,588	30,236	11,928	2,834	316	259
1996	67,653	16,540	5,339	30,230	11,978	2,887	247	288
1990	69,827	16,718	5,650	31,419	12,559	2,962	261	258
1997	72,101	17,122	5,682	31,419	13,381	3,171	447	299
1999	75,341	18,085	6,138	31,999	14,959	3,609	357	299
2000	75,910	18,313	6,500	29,409	16,891	4,228	225	344
2000	84,493	22,047	7,825	28,237	20,065	5,390	453	476
2001	93,709	23,357	7,623	34,569	21,620	5,782	454	410
2002		25,337	7,317	40,695	23,006	5,766	405	557
2003	103,528 112,074	24,573	10,374	43,759	24,947	6,481	1,236	706
			10,374					652
2005	118,848	25,871		48,868	25,688	6,705	690	
2006	121,730	27,675	9,118	52,754	24,670	6,063	625 362	824
	127,263	29,933	9,383	55,342	25,548	5,984		711
2008	127,106	29,638	8,192	56,338	26,027	5,965	389	559 507
2009	141,090	31,544	10,200	59,749	31,558	7,050	392	597
2010	140,355	30,912	10,101	59,868	31,192	7,245	427	610
2011	135,533	35,145	10,786	53,550	27,680	6,678	716	977
2012	138,525	34,366	10,058	58,910	27,509	6,388	453	839
2013	125,720 130,561	32,963 34,736	10,080 10,565	49,538 50,237	25,772 27,429	6,249 6,418	386 446	732 730

TABLE 84

Federal obligations for research and development, by performer: FYs 1967–2022

(Dollars in millions)

		Intramural		Extramural					
Fiscal year	Total	Federal agencies <sup>a</sup>	FFRDCs	Businesses	Higher education <sup>b</sup>	Nonprofit organizations	State and local governments	Non-U.S. performers	
2015	128,753	34,925	11,119	47,483	27,415	6,288	487	1,036	
2016	115,833	32,351	11,423	35,811	28,199	6,682	543	824	
2017	118,975	30,990	11,694	37,875	28,963	8,141	553	758	
2018	129,425	35,953	12,455	39,754	31,534	8,451	562	715	
2019	142,424	39,313	14,691	44,446	34,001	8,450	586	937	
2020	167,403	51,472	13,150	51,428	38,541	10,699	720	1,393	
2021	190,151	71,665	14,791	50,225	39,766	11,985	966	753	
2022 (preliminary)	189,059	69,232	15,162	50,762	40,458	11,753	937	755	

FFRDC = federally funded research and development center.

## Note(s):

Because of rounding, detail may not add to total. FFRDC funding over the years may be affected by the creation of new FFRDCs and the phasing out of other FFRDCs. For details, see the notes in the Master Government List of Federally Funded R&D Centers at http://www.nsf.gov/statistics/ffrdclist/#ffrdc. FYs 2009 and 2010 obligations include additional funding provided by the American Recovery and Reinvestment Act of 2009. Beginning with FY 2016, the totals reported for development obligations represent a refinement to this category by more narrowly defining it to be "experimental development." Most notably, totals for development do not include the Department of Defense (DOD) Budget Activity 7 (Operational Systems Development) obligations. Those funds, previously included in DOD's development obligation totals, support the development efforts to upgrade systems that have been fielded or have received approval for full-rate production and anticipate production funding in the current or subsequent fiscal year. Therefore, the data are not directly comparable with totals reported in previous years. As of volume 71 (FYs 2021–22), FFRDCs are classified as intramural R&D performers, whereas they were extramural in previous volumes; therefore, data are not directly comparable across volumes. Past years in the trend tables have been adjusted to reflect the current classification of FFRDCs. FYs 2020, 2021, and 2022 obligations include additional funding provided by supplemental COVID-19 pandemic-related appropriations (e.g., Coronavirus Aid, Relief, and Economic Security [CARES] Act).

## Source(s)

National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development.

<sup>&</sup>lt;sup>a</sup> Federal agencies' activities cover costs associated with the administration of federal R&D performance and R&D procurements from nonfederal performers by federal personnel, transfers of funds to other federal agencies for purposes related to R&D, and actual federal performance.

<sup>&</sup>lt;sup>b</sup> Higher education includes both public and private institutions as well as University Affiliated Research Centers.